

Animal Identification

The second component of NAIS is animal identification, which provides a nationally unique numbering system for identifying animals. Animals can be officially identified individually or as a group, depending on the species. Owners should identify their animals before the animals leave their home premises and enter commerce, or before they are moved from their home premises to another location where the possibility of commingling with other animals presents an increased risk of disease transfer or exposure (such as livestock exhibitions, sporting events, auction markets, feedlots, etc.).

Official animal identification devices that are compliant with NAIS standards are available for most species. See http://animalid.aphis.usda.gov/nais/animal_id/index.shtml and select “AIN Devices” in the Quick Downloads box on the right for a list of devices available for the following species: Cattle and Bison, Swine, Sheep and Goats, Cervids (deer and elk), Equines (horses, mules, donkeys, burros), and Camelids (llamas and alpacas).

Household pets (cats and dogs) are not included in NAIS.

ANIMAL IDENTIFICATION

KEY POINTS

Animal identification serves a variety of purposes in surveillance and disease control.

- Electronic health certificates or Certificates of Veterinary Inspection (eCVIs) require official animal identification, and the number assigned by NAIS can be used to meet this requirement.
- When testing animals as part of a surveillance program for diseases such as tuberculosis or pseudorabies, official individual identification is required because of its importance in providing the means to follow up on positive or negative animals.
- Healthy or non-exposed animals may be officially identified as part of a regionalization or compartmentalization approach following an outbreak to facilitate business continuity.
- Animals are officially identified to show they have been vaccinated for a regulated disease, such as brucellosis.
- Official identification must be used for animals that have reacted positively to a test for a regulated disease.



Individual Animal Identification Number (AIN)

The individual animal identification number (AIN) is an official, unique, 15-digit number that stays with the animal for its lifetime. The AIN is imprinted on identification devices with a space between every third digit to improve readability. For example: 840 234 567 890 123

- The first three digits of the AIN comprise the country code—840 is the United States country code and is assigned by the International Committee on Animal Recording (ICAR).

The AIN provides a unique identifier for the animal anywhere in the world. The 15-digit number is required on all official AIN devices and will soon be required on certain USDA forms. The AIN Management System initially associates the AIN with the PIN from the animal's premises of origin—either its birthplace or where it was first identified. This serves as the starting point for the animal in the system—and these data (the AIN and associated PIN) remain in the Federal database.

Ideally, the AIN is attached to the animal before it leaves its current premises. However, some owners may elect to attach AINs at birth and utilize them in their on-farm recordkeeping system. Animals that are born, raised, and housed on the same location and that do not enter commerce may not need to be officially identified unless the owner so chooses.

NAIS Species Working Groups continue to evaluate and recommend which identification devices and methods work best for their species/industry and will help determine appropriate standards for USDA official identification devices and methods.

Group/Lot Identification Number (GIN)

Animals that typically move through the production chain as a group of animals of the same species, as is common in the swine or poultry industries, can be identified by GINs, rather than individual numbers. However, this option is not restricted to swine and poultry, as it may also apply to other specific animal groups. An animal removed from the group should be identified individually if it will be making **reportable movements** (e.g., to a veterinary clinic for treatment or to a livestock show). Once animals are commingled, they are no longer being maintained as a separate group. Even if animals are kept in the same pen (i.e., at a feedlot or auction market), they are on a different premises and are considered commingled by virtue of exposure to pathogens via aerosol, water sources, or alleyway trafficking, among other potential indirect transmission routes.



Reportable Movements

Reportable movements are those that impact the spread of animal diseases. Examples include commingling animals on another facility or moving animals to an auction or market, national/regional exhibitions, or sporting events. Reportable animal movement activity will be defined by State, Territorial, Tribal and Federal animal health officials.



The group identification number (GIN) is a 15-character number. For example: A23456710030204

- The first seven numbers and/or letters are the seven-character PIN of the location where the group is being created.
- The next six numbers are the date the group was assembled in MMDDYY format—in this case, on October 3, 2002.
- The last two numbers reflect the count of groups assembled at the same premises on the same day (starting with 01)—in this case, the fourth group assembled on October 3, 2002, at premises A234567.

The GIN is not assigned by USDA; rather, it is “self-generated” by the producer at the premises for animals at that location based on the format described above. It is also maintained by the producer in his/her management records, not by USDA or States, Territories, or Tribes. The Species Working Groups will provide more recommendations on a species basis about how group movements should be maintained and/or reported.

Types of Acceptable Individual Animal Identification

The official numbering system used in NAIS can be used with all disease programs for a variety of species and offers enhanced traceability. However, USDA has utilized official identification for years in various animal disease programs. There are several formats for official identification currently in use.

As the transition to NAIS occurs over time, USDA will continue to recognize all official identification numbers and devices currently existing. No previously recognized USDA official numbering system will be discontinued in the near future. For example, animals currently identified through official programs like the National Scrapie Eradication Program do not need to be re-identified for NAIS, even though the owners may have acquired a PIN in addition to a scrapie flock number.

USDA official numbering systems for individual animal identification include, but are not limited to:

National Uniform Eartagging System

- Brucellosis calfhood vaccinations (orange tags)
- Tuberculosis testing (bright tags)

Flock Identification Number with a unique herd management number

- National Scrapie Eradication Program

Animal Identification Number (AIN)

- Chronic wasting disease, tuberculosis, and brucellosis

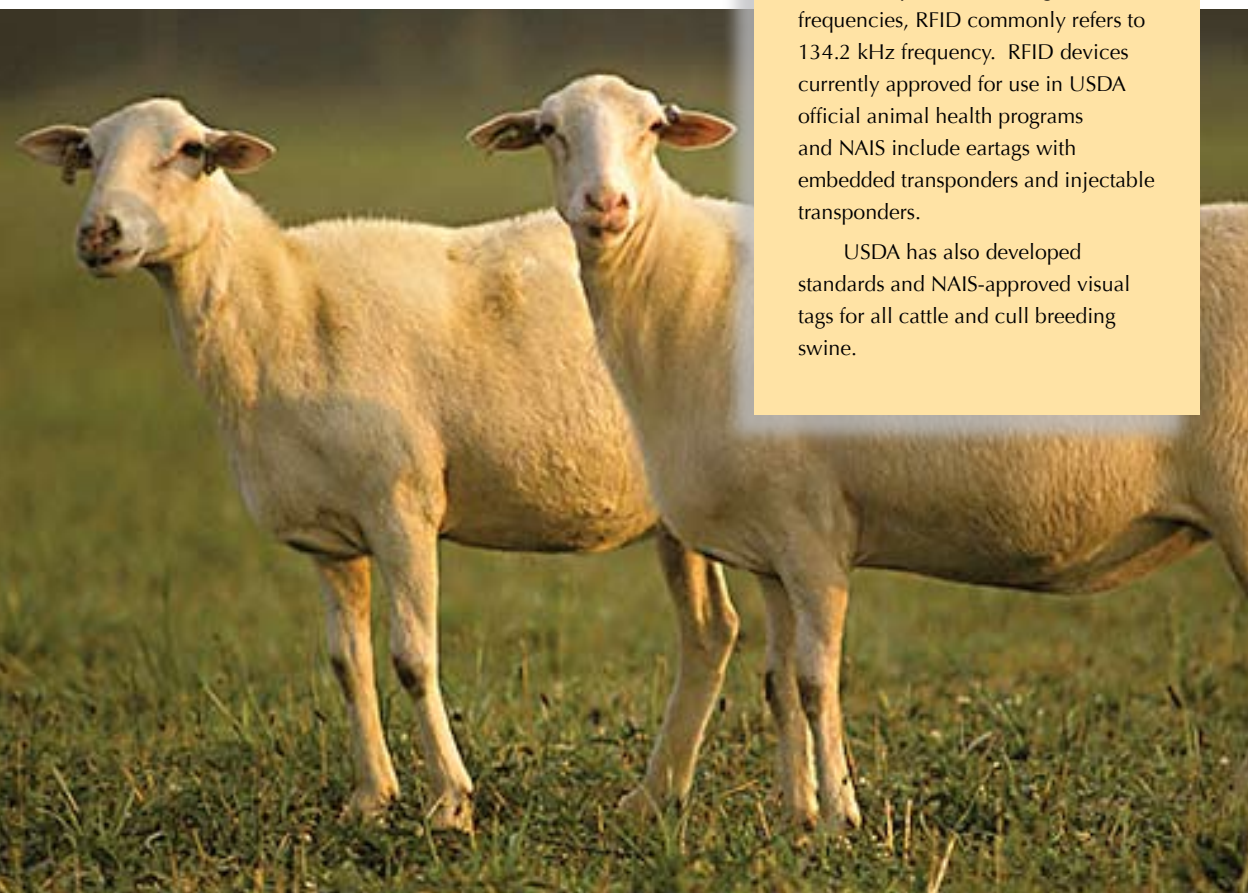
Cattle and sheep are typically identified with either a visual or **radio frequency identification (RFID)** (134.2kHz) eartag while horses, llamas, alpacas, and other species may be identified with an injectable, RFID [134.2 kHz (NAIS) or 125 kHz (non-NAIS)] device.



Radio Frequency Identification (RFID)

RFID is a device that utilizes radio frequency technology. While RFID can encompass a wide range of frequencies, RFID commonly refers to 134.2 kHz frequency. RFID devices currently approved for use in USDA official animal health programs and NAIS include eartags with embedded transponders and injectable transponders.

USDA has also developed standards and NAIS-approved visual tags for all cattle and cull breeding swine.



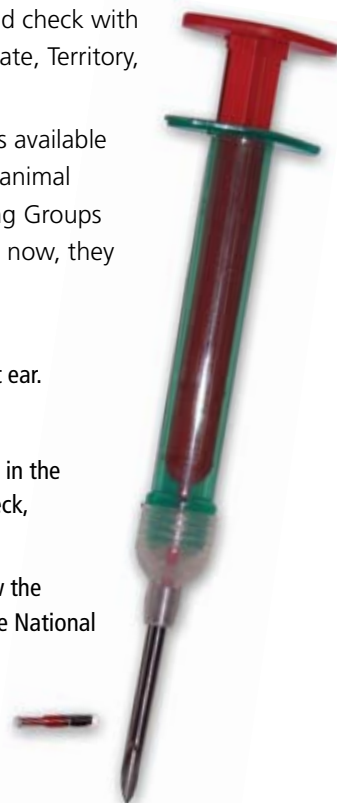
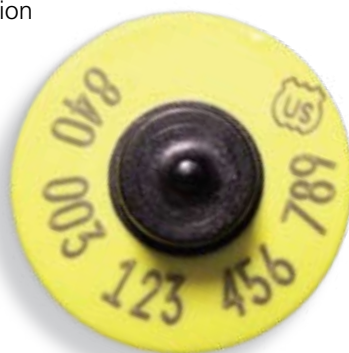
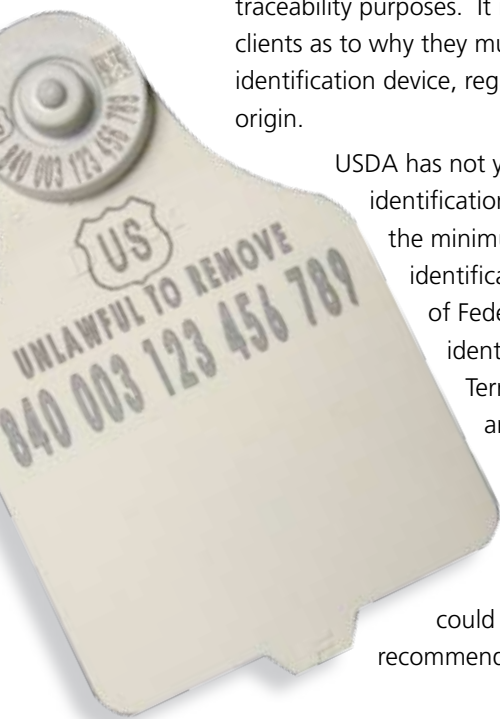
Individual Animal Identification Devices

It is unlawful to remove USDA official animal identification devices/tags. It is also unlawful to remove official country identification device(s)/tags(s) from imported animals. These official country identification devices/tags are critical for traceability purposes. It is important to educate clients as to why they must not remove any official identification device, regardless of the country of origin.

USDA has not yet designated any specific identification technologies beyond the minimum requirements for official identification that have been described in the Code of Federal Regulations. However, official animal identification requirements can vary at the State, Territory, or Tribal level, so be sure and check with animal health authorities in your State, Territory, or Tribe for more information.

As more information becomes available on the various technologies for animal identification, the Species Working Groups could alter their recommendations. For now, they recommend the following:

- Cattle – RFID ear tag attachment should be placed in the left ear.
- Bison – undetermined at this time.
- Equine – RFID (injectable transponders) should be implanted in the nuchal ligament on the left side, in the middle third of the neck, halfway between the ears and the withers.
- Sheep & Goats – official forms of identification should follow the guidelines set forth in the Uniform Methods and Rules for the National Scrapie Eradication Program.
- Cervids – undetermined at this time.
- Camelids – undetermined at this time, but RFID injectable transponders implanted at the base of the ear are currently used in various breed registries.
- Swine and Poultry – animals in many of these productions settings would be identified as group/lot rather than individually, but identification devices can be provided when individual animal ID is warranted (e.g., show pigs, cull sows, and boars).



Obtaining Individual Animal Identification Devices

1

Obtain a PIN

- Before individual animals can be identified, the producer or animal owner must first obtain a PIN. The PIN is linked to all of the AINs for that location.

2

Contact an AIN Manager for official identification devices

- AIN Managers have agreements with manufacturers that have been authorized by USDA to distribute devices that include AINs.
- As a veterinarian, you can become an AIN Device Manager/Reseller or distributor; contact your State animal health office or visit the NAIS Web site for more information at http://animalid.aphis.usda.gov/nais/naislibrary/documents/guidelines/Steps_for_Becoming_an_AIN_Device_Manager.pdf.
- Each manufacturer is allocated specific AINs to ensure that the uniqueness of that number is maintained.
- The AIN Management System Web page lists authorized AIN devices, their manufacturers, and the species for which they are recommended at http://animalid.aphis.usda.gov/nais/animal_id/ain_mngt_sys.shtml. USDA updates the page as additional manufacturers are authorized, so you should check back periodically for more options.


3

Provide your PIN to the AIN Manager

- The manager will validate the PIN.
- The devices will be shipped or delivered to the premises.

4

Inspect the official AIN devices upon arrival

- Official AIN devices (with the exception of injectable transponders) must contain:
 - The 15-digit animal identification number (AIN),
 - The U.S. Shield, 
 - The words, "UNLAWFUL TO REMOVE."
- The approved device manufacturer is required to imprint or engrave its trademark or logo on the device.

Applying Identification Devices

NAIS identification devices may be applied whenever preferred by the producer, but no later than when the animals leave the premises for treatment, a livestock show, a sporting event, a market or auction, or to go to another person's farm or ranch, unless moved directly to an official tagging site. Becoming approved as an Official Tagging Site could enable you to provide a service for your clients that could easily be tied to other herd health services. [For more information about becoming an Official Tagging Site, contact your State NAIS Administrator at http://animalid.aphis.usda.gov/nais/contact_us/directories.shtml.]

If there are extra devices/tags left over once all of the animals on a premises have been identified, the materials should be stored in a secure location. Under no circumstances should extra devices/tags be given or sold to another producer, because all purchased AIN tags are linked in the AIN Management Information System to the PIN for the location where they were shipped or delivered.

Lost/Malfunctioning Identification Devices

In the event that an animal loses its official identification, it should be re-identified as soon as possible. Ideally, the previous number along with the new number should be recorded in the information system (e.g., noted in the owner's production records or to the Animal Tracking Database [ATD], if data with the original AIN were previously submitted). If an animal was purchased, and its original number is not known, the person responsible for the animal should document the new identification number and as much detail about the animal as possible in his/her production records.

If the RFID tag malfunctions, the animal should also be re-identified with a new device in a timely manner. Again, the new number along with the previous number should be recorded and reported to the information system (ATD).

RFID field application issues, such as tag retention, proper placement on the animal, and temperature effects, were reviewed in USDA-funded Pilot Projects from 2005 through 2007. More information about these projects is available at http://animalid.aphis.usda.gov/nais/naislibrary/documents/plans_reports/PilotProjectReportFINAL05-01-2007.pdf.